

REMARKS/ARGUMENTS

Favorable consideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1, 4 and 8-31 are presently pending in this application, Claims 16-31 having been withdrawn from further consideration by the Examiner, Claims 2, 3 and 5-7 having been canceled, and Claims 1, 4 and 8 having been amended by the present amendment.

In the outstanding Office Action, the title of the application was objected to for not being descriptive; Claims 1-4 and 8-15 were rejected under 35 U.S.C. §102(a) as being anticipated by JP 2003-075024 (hereinafter “JP ‘024”); and Claims 5-7 were rejected under 35 U.S.C. §103(a) as being unpatentable over JP ‘024.

In response to the objection to the title of the present application, the title has been amended herein as suggested by the Examiner. The amended title is believed to be fully descriptive of the present invention and no further objection to the title is therefore anticipated.

Claims 1, 4 and 8 have been amended to clarify the subject matter recited therein. These amendments find support in the specification, claims and/or drawings as originally filed, and no new matter is believed to be added thereby. If, however, the Examiner disagrees, the Examiner is invited to telephone the undersigned who will be happy to work in a joint effort to derive mutually satisfactory claim language.

Before addressing the rejections based on the cited reference, Claim 1 as currently amended is briefly reviewed. Claim 1 is directed to a heat exchanger and recites: “a refrigerant inlet-outlet tank; and a refrigerant turn tank arranged as spaced apart from the refrigerant inlet-outlet tank; and a plurality of tube groups in the form of rows arranged at a spacing in the direction of flow of air through the heat exchanger between the tanks and each comprising a plurality of heat exchange tubes arranged in parallel at a spacing longitudinally

of the tanks, the heat exchange tubes of each tube group having opposite ends joined to the respective tanks, wherein the refrigerant inlet-outlet tank has a refrigerant inlet header chamber and a refrigerant outlet header chamber arranged in the direction of flow of air, each of the two header chambers is in communication with the heat exchange tubes of the tube group of at least one row, a refrigerant flowing into the inlet header chamber of the refrigerant inlet-outlet tank is flowable through the corresponding heat exchange tubes into the refrigerant turn tank, where the refrigerant changes a course to flow into the outlet header chamber of the refrigerant inlet-outlet tank through the corresponding heat exchange tubes, the refrigerant turn tank is provided with a uniformalizing member for making uniform divided flows of the refrigerant from the inlet header chamber into the heat exchange tubes communicating with the inlet header chamber, the uniformalizing member comprises a divided flow control plate dividing the interior of the refrigerant turn tank into two spaces arranged in the direction of flow of air, the heat exchange tubes in communication with the inlet header chamber are communicating with one of the spaces of the refrigerant turn tank, the heat exchange tubes in communication with the outlet header chamber are communicating with the other space of the refrigerant turn tank, and approximately a one-half of the entire length of the divided flow control plate is a refrigerant dam portion and the remaining half is formed therein at least two refrigerant passing holes to communicate the two spaces of the refrigerant turn tank.”

That is, the uniformalizing member uniformalizes the refrigerant flow in the heat exchange tubes communicated with the refrigerant inlet header chamber of the refrigerant inlet-outlet tank, thereby improving the heat exchange efficiency of the heat exchanger recited in Claim 1.

It is respectfully submitted that “a refrigerant turn tank arranged as spaced apart from the refrigerant inlet-outlet tank ..., wherein ... the refrigerant turn tank is provided with a

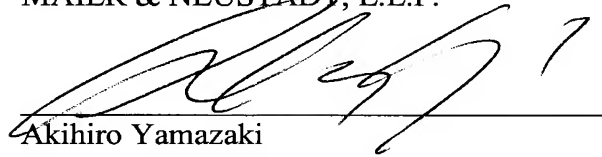
uniformalizing member for making uniform divided flows of the refrigerant from the inlet header chambers into the heat exchange tubes communicating with the inlet header chamber, the uniformalizing member comprises a divided flow control plate dividing the interior of the refrigerant turn tank into two spaces arranged in the direction of flow of air, the heat exchange tubes in communication with the inlet header chamber are communicating with one of the spaces of the refrigerant turn tank, the heat exchange tubes in communication with the outlet header chamber are communicating with the other space of the refrigerant turn tank, and *approximately a one-half of the entire length of the divided flow control plate is a refrigerant dam portion and the remaining half is formed therein at least two refrigerant passing holes to communicate the two spaces of the refrigerant turn tank*” as recited in Claim 1 (emphasis added in italic). Therefore, the structure recited in amended Claim 1 is clearly distinguishable from JP ‘024 and is not anticipated thereby. Furthermore, because JP ‘024 does not disclose the uniformalizing member structure as recited in Claim 1, its teachings are not believed to render the heat exchanger of Claim 1 obvious.

For the foregoing reasons, Claim 1 is believed to be allowable. Furthermore, since Claims 4 and 8-15 depend directly or indirectly from Claim 1, substantially the same arguments set forth above also apply to these dependent claims. Hence, Claims 4 and 8-15 are believed to be allowable as well.

In view of the amendments and discussions presented above, Applicants respectfully submit that the present application is in condition for allowance, and an early action favorable to that effect is earnestly solicited.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read 'Akihiro Yamazaki', is written over a horizontal line.

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